

What is claimed is:

1. A method for reducing the latency time for interactive data communication between a server computer (6) and a client computer (2) via a telecommunication network, in particular via a satellite network (4) comprising a geostationary satellite (12), whereby (6) a data processing application (14), in particular a database application, runs on the server and generates screen displays of an interactive user application with several data fields (18) that are processed one after the other in a processing sequence in line with predetermined parameters (#1, #2, #3) based on commands and data entered via an input medium (30) connected to the client computer (2) and are then transferred to the client computer (2) in the form of data packets essentially without acknowledgment of receipt and displayed by this client computer (2) on a display medium (26), whereby on the display medium (26) a command prompt (7) signalizes that additional data is to be entered in a corresponding data field (18) via the input medium, and then transmitted in the form of additional data packets via the telecommunication network (4) to the server computer (6), wherein the parameters (#1, #2, #3) for the processing sequence of the data fields (18) are transferred via the telecommunication network (4) to the client computer (2), and an independent program routine (22) runs on the client computer (2) which alters the screen display independently in such a way when entering specified commands via the input medium (30, 32) based on the parameters (#1, #2, #3) for the processing sequence that the input prompt (7) within a data field (18) is moved to the next or previous data field in line with the processing sequence.

2. Method according to claim 1
wherein the server computer (6) is operated using a window-based operating system,
whereby the screen displays transmitted to the client computer (2) are generated on
5 the server computer (6) using a window program routine (20) of the operating system
on the server computer (6) based on window and object parameters prior to being sent
to the client computer (2).
3. Method according to claim 2
10 wherein the independent program routine (22) receives the parameters (#1, #2, #3) for
the processing sequence of the data fields by accessing the window program routine
(20) of the operating system on the server computer (6).
4. Method according to claim 2 or 3
15 wherein the independent program routine (22) receives a copy (34) or partial copy of
the window and object parameters which the window program routine (20) of the
operating system on the server computer (6) uses to generate the active screen display.
5. Method according to one of the previous claims
20 wherein the independent program routine (22) additionally receives the type and/or
style and/or size of the font used in a data field (18) alongside the parameters (#1, #2,
#3) for the processing sequence of the data fields.
6. Method according to one of the claims 2 to 5
25 wherein the independent program routine (22) receives the parameters (#1, #2, #3) for
the processing sequence of the data fields (18) and/or the window and object
parameters from an additional program routine (24) running on the server computer
(6).
7. Method according to one of the claims 2 to 6
30 wherein the independent program routine (22) analyzes the commands and/or data
entered via the input medium (30, 32) before sending these to the server computer (6)

and independently alters the active screen display based on the processing sequence (#1, #2, #3) and the window and object parameters.

8. Method according to claim 7

5 wherein the independent program routine (22) independently alters the active screen display based on the processing sequence (#1, #2, #3) as well as the window and object parameters in such a way that the input prompt (7) is moved to the start of the previous data field (18) when a specified command occurs which is assigned to a backward jump to a previous data field (18).

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9. Method according to claim 7 or 8

15 wherein the independent program routine (22) independently alters the active screen display based on the processing sequence (#1, #2, #3) as well as the window and object parameters in such a way that the input prompt (7) is moved to the start of the next data field (18) when a specified command occurs which is assigned to a forward jump to a previous data field (18).

10. Method according to one of the previous claims

20 wherein the independent program routine (22) analyzes the position of a data pointing device (32) assigned to the input medium, in particular a mouse pointer, and independently alters the display of an object (36, 38) contained in the active screen display in a predefined manner when the position of the data pointing device (32) corresponds to a predefined position or a section in the active screen display.

25 11. Method according to claims 7 and 10

30 wherein the independent program routine (22) independently alters the display of the object (36) contained in the active screen display in the predefined manner when the position of the data pointing device (32) corresponds to a predefined position or a section in the active screen display and a predefined command is entered essentially simultaneously via the input medium (30, 32).

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12. Method according to claims 11

wherein the object is a button (36) which changes the display types when the user clicks on it with the data pointing device (32).

5 13. Method according to claim 11

wherein the object is a scroll bar (38) and when clicked on by the user with the data pointing device (32), the display of the scroll bar (38) is altered in a predefined manner and at least a part of the content of the active screen display is moved.

10 14. Method according to one of the previous claims

wherein the screen displays are transmitted at least in part in the form of bitmap files to the client computer (6).

15 15. Method according to one of the previous claims

wherein the transfer of the screen displays takes place in line with the RDP protocol.

16. Method according to one of the previous claims

wherein the transfer of the additional data packets from the client computer (2) to the server computer (6) takes place essentially without acknowledgments of receipt of the additional data packets being sent by the server computer (6).

17. Method according to one of the previous claims

wherein the additional data packets are checked for redundant data, with any such redundant data then being removed or replaced by data already entered, before they are sent to the server computer (6).

18. Method according to one of the previous claims

wherein the data packets generated by the server computer (6) are checked for redundant data, with any such redundant data then being removed or replaced by data kept by the server computer (6) before they are sent to the client computer (2).

19. Method according to one of the previous claims

wherein several of the data packets and/or additional data packets to be sent between the server computer (6) and the client computer (2) via the geostationary satellite (12) are grouped together to form larger data packets and/or larger additional data packets.

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20. Method according to claim 19

wherein the grouped larger data packets and/or the grouped larger additional data packets have an optimized size in such a way that their transfer via the geostationary satellite (12) takes place without the data packets and/or additional data packets being fragmented.

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21. Method according to claim 20

wherein the optimized size of the larger data packets and/or the larger additional data packets is determined based on the connection-specific parameters by the server computer (6) when setting up the satellite network (4) for the corresponding connection to the client computer (2).

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